

Commonwealth of Kentucky
Division for Air Quality
FINAL PERMIT STATEMENT OF BASIS

FINAL CONDITIONAL MAJOR PERMIT NO. F-06-027

AKEBONO-AMTEC BRAKE L.L.C

SPRINGFIELD KY.

SEPTEMBER 26, 2006

RITA ARGUELLO, REVIEWER

PLANT I.D. # 021-229-00019

APPLICATION LOG # F999

AI# 34345

GENERAL SOURCE DESCRIPTION:

Akebono-AMTEC Brake is an automotive manufacturing facility, which was established in 2002 and is located in Springfield, Kentucky. Currently employees are approx. 250 team members. Akebono-AMTEC manufactures original and aftermarket disc brake pads. The source began operation in June 2002.

To make the brake pads, friction material is mixed, blended and hot molded. The formed pad is attached to a metal pressure plate. Pads are cured in ovens using natural gas burners. After curing, the disc brake pads are sent through a grinding/slitting and scorching process. A powder coating is then applied to the steel parts of the disc brake assembly and cured in an electric oven. The hot mold presses are the plant wide limiting step in the process at a rate of 2,548 pads/hour or 22,320,000 pads per year, using 7822.4 tons per year of friction material. The disc brake pads are marked with ink jet printer and packaged for shipment.

In 2006, AMTEC added the Remanufacturing Caliper process, which is also distributed to a number of aftermarket distributors. Akebono-AMTEC self imposed limitation on PTE to prelude Title V Permit applicability for Particulate Matter.

PUBLIC AND U.S. EPA REVIEW:

Public notice was placed in the Springfield Sun on October 4, 2006. The comment period ended on November 3, 2006. There were no comments from the public. There were no comments from U.S. EPA. There were comments from the consultant firm CFW Associated Engineers, Inc, representing AMTEC. CFW comments and the Division responses are in the Attachment A.

INDIVIDUAL UNIT, OPERATION OR ACTIVITY EMISSION AND OPERATING CAPS:

01(05) Mix Blend 1

02(05) Mix Blend 2

03(05) Surface Treatment Adhesive Booth

04(06) OE Line 1 Slitter/Grinder #1A

05(06) OE Line 1 Slitter/Grinder #1B

06(06) AM Line 1 Slitter/Grinder 1

07(06) AM Line 1 Slitter/Grinder 2

08(06) AM Line 1 Slitter/Grinder 3

09(07) AM Line 2 Slitter/Grinder

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10(32) Ink Jet printing
11(05,06,07) 42 HOT MOLD PRESSES

EP (01 to 09) 05, 06 and 07

AMTEC shall submit a notification and get an approval from the Division if the friction material chemical composition changes prior to usage in the operation line.

Construction: All equipment was installed on 02/01/2002.

EP (10) 32

This emission is VOC and is greater than 5 tons per year. Printer was installed on 03/01/2006

EMISSION AND OPERATING CAPS:

Applicable Regulation:

401 KAR 52:030 Federal-enforceable permits for nonmajor sources.

401 KAR 59:010 New process operations.

Operation Limitations:

Particulate Matter emissions shall not to exceed 90 tons per year to prelude applicability of Title V permitting.

Control and Efficiency:

Baghouses. The efficiency is assumed to be 99%, according to Akebono-Amtec Brake information.

Monitoring:

If visible emissions are seen, the permittee shall determine the opacity emission by Reference Method 9, initiate an inspection of the control equipment, and make any necessary repairs.

CREDIBLE EVIDENCE:

This permit contains provisions, which require that specific test methods, monitoring or recordkeeping be used as a demonstration of compliance with permit limits. On February 24, 1997, the U.S. EPA promulgated revisions to the following federal regulations: 40 CFR Part 51, Sec. 51.212; 40 CFR Part 52, Sec. 52.12; 40 CFR Part 52, Sec. 52.30; 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12, that allow the use of credible evidence to establish compliance with applicable requirements. At the issuance of this permit, Kentucky has only adopted the provisions of 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12 into its air quality regulations.

Attachment A

Response to Comments from CFW

CFW requested: In Permit Statement of Basis (SOB) the Hot Press Operations associated with Emission Points 5, 6 & 7 should be added to this list.

Division responds: The Division agrees and changed the SOB to reflect it.

CFW requested: Draft Permit Statement of Basis states "Amtec shall submit a notification and get an approval from the Division if the friction material vendor supplier or chemical composition changes...", could that be changed to "...if the Chemical Composition changes" and delete vendor supplier?

Division responds: The Division agrees and changed the SOB to reflect it.

CFW requested: Draft Permit - Section B, page 3 of 10, description. The Hot mold presses, 42 units in the written description...should be added to the emission point list.

Division responds: The Division agrees and change has been made.

CFW requested: Draft Permit – Section B, page 4 of 19, No. 2, Emission Limitations (a). "Amtec proposes to demonstrate compliance with the hourly particulate emission limit by monitoring the amount of friction material sent to the local landfill"...and proposed an equation based on waste.

Division responds: The Division Agrees to change the existing compliance equation to one that uses the measure of production rate. The particulate matter (PM) emissions shall be calculated as follow:

$$\text{Emission factor} = \frac{\text{lb/hr of PM calculated from the stack testing}}{\text{Parts /hour measured during the stack testing}}$$
$$\text{PM emission} = \frac{\text{Monthly Parts Produced} * \text{Emission Factor}}{\text{Monthly hours of operation}}$$

A one-time stack test shall be performed for all control devices within 90 days of the issuance of the final permit, F-06-027.

CFW requested: Draft Permit – Section B, page 4 of 19, No. 4, Specific Recordkeeping Requirements (a). "Amtec does not maintain hourly/daily production or inventory ...CFW is recommending that this paragraph be modified to require monthly inventory tracking.."

Division responds: The Division agrees and change has been made.

CFW requested: Draft Permit – Section C, Insignificant Activities, #17. "This insignificant activity was part of a separate list of insignificant activities submitted to the DAQ in February 2006..."the Parts Blaster shown in #17 has 4 units, not 2 units as shown in the draft permit."

Division responds: The Division agrees and change has been made.

Attachment A

Response to Comments from CFW (Continue)

CFW requested: Draft Permit – Section C, Insignificant Activities. ..There are two additional insignificant activities from the remanufacturing process that have been omitted from the list. These are Ink Jet Printer and Touch Up Paint Booth.

Division responds: The Division agrees and added them to the Insignificant Activities list.

CFW requested: Draft Permit – Section D, Source Emissions Limitations and Testing Requirements (c). CFW proposed an equation to comply with 90 tons/year of total particulate emissions, based on the waste sent to the local landfill.

Division responds: See the changes above.